

REVIEWS OF RECENT BOOKS.

Castle, PROFESSOR W. E. *Genetics and Eugenics*. Oxford University Press; 1916; price 10s. 6d.; pp 353.

PROFESSOR CASTLE tells us that this book is an attempt to present, in a form as simple and readily intelligible as possible, the subject of heredity, as related to man, domestic animals, and cultivated plants; and very well he has succeeded in his efforts. In Part I., which is by far the larger part, the science of genetics is dealt with in a way to give the uninstructed reader an excellent idea of the chief points which have been and are in dispute. The author's own views are clearly stated, some of which will find both keen opponents and warm adherents.

In the earlier chapters a brief account is given of the contributions of Lamarck, Darwin, Spencer, Weismann, and others, to the theory of evolution, Weismann's germinal selection and De Vries' mutation theory both being rejected. Although Kammerer's experiments are dismissed as inconclusive, the inheritance of acquired characters is regarded as still being an unsolved problem. The effects of use and disuse afford an easier explanation of evolution in certain respects than does the selectionist view, and "if the germ-cells are thus capable of modification, evolution guided by environment must be in some measure at least a reality" (p. 46). A brief account of biometric methods is followed by several chapters dealing with Mendelian inheritance, including sex-linked inheritance, together with the description of a large number of unit characters in animals, plants and insects. A discussion of the constancy or variability of these unit characters leads to the conclusion that "selection, as an agency of evolution, must be restored to the important place which it held in Darwin's estimation, an agency capable of producing continuous and progressive racial changes" (pp. 188-189).

It is in discussing blending inheritance that Professor Castle departs markedly from the views held by the more rigid advocates of Mendelism; for he suggests that, when crosses take place, the factors are modified in the zygote, and thus slowly blend in the course of several generations. He considers that it is futile to attempt "to bring blending inheritance under a generalised statement of Mendel's laws" (p. 217), and that it is best "frankly to recognise the existence of two categories of cases distinct in their inheritance behaviour."

Part II., which covers less than 50 pages, deals with eugenics, and here I must confess to a certain feeling of disappointment at the absence of that bold encouragement which our movement now needs from men of science. In many respects, however, not only is the discussion very interesting, but he does not mince matters. For example, Dr. Goddard's Vineland work in connection with the feeble in mind is spoken of with approval, and the conclusion is reached that such persons "should not be allowed to marry unless first sterilised. In the case of males this is now a very simple operation, whilst with females segregation during the reproductive period is more to be recommended" (p. 259). Pearson's and Davenport's experimental investigations are criticised on the ground that they are influenced by prejudice, the one against Mendelism and the other for it. As to English eugenists, it is pointed out that the point of view of certain writers, Mr. and Mrs. Whetham, for example, "is to some extent an aristocratic one" (p. 265), a view which gets little encouragement from our author. Here we might perhaps learn with

advantage from our American critic the wisdom of basing our propaganda more on the differences between those capable of earning an independent existence and the slum-dwellers.

The following sentence, which is quoted with approval by Professor Castle, perhaps expresses his conclusions in the fewest words, for he generally seems to lay the emphasis on *performance* in regard to environmental reform and *investigation* in regard to eugenics. "It should be our principal business to improve our civilisation by giving opportunity to those who are fit, while at the same time investigating the conditions which will give us a better race" (p. 272). He favours the view that "it is possible for social progress to occur in spite of biological deterioration" (p. 272), but lays no stress on the fact that social progress would be far more rapid if racial improvement had preceded it. In support of his views, he asserts that "as individuals, primitive men were probably more than a match for us physically and at least our equals mentally" (p. 273). But is not the size of the brain the only guide to the mental equipment of primitive man, and is not this a very fallible guide? Moreover, this does not disprove the possibility of racial advance and decline having taken place unless it is held that all men not only always have been, but are now, mentally identical in natural capacity. Though he tells us clearly that "it is certain that human progress depends upon two sets of agencies, one sociological or cultural, the other biological" (p. 274), yet to the biological agency he often seems to give but half-hearted support. He states that "the modern eugenic ideal is to make a conscious selection of parents within the group with a view to elevating the normal within the group" (p. 276). But if by this is meant anything approaching to marriage controlled by "a central directing agency," then it is certainly very far removed from the English eugenic ideal, and to associate the two together is damaging to our cause. It may be right "not to legislate till we are very sure of our ground," but it is a mistake to stand still. The great leaders of men have been those who have not hesitated to advocate an advance along paths beset with dangers, provided the advantages to be gained were commensurate with the risks run, and it is more in this spirit that we wish the leaders of science to attack the eugenic problem. For progress without risk is impossible.

L. D.

Warman, MAJOR W. H. *The Soldier Colonists*. Chatto and Windus; price 5s. 6d. net.

Now that demobilisation has commenced an unprecedented number of men will throng the world's activities. It has been estimated that about 17 per cent. of the Army, that is, about 750,000 men, will want to go on the land. Not all of these will wish to emigrate, but it is hoped that to those who do, we shall not show that ingratitude which became a by-word after the Crimean and Boer wars.

No one believes that we have only to pick up the old threads of the tangled, and now blood-stained skein, that was dropped at the commencement of the war; reconstruction has indeed become a mania. It may not, therefore, be too much to hope that a carefully-thought-out and well-organised scheme will be prepared, to deal with these would-be emigrants; and that the whole question of emigration will not, in fact, be left to the old policy of *laissez-faire*, but will receive the earnest consideration and co-operation of the authorities at home with those in the Dominions. *The Soldier Colonists*, by Captain (now Major) W. H. Warman (Chatto and Windus; price 5s. 6d. net), is by far the most valuable contribution to this subject that has yet appeared. The two chapters by Mr. Collin Brookes, though of less interest, since they contribute nothing to the constructive idea, give a brief history of some of the earlier attempts at group colonisation, which serve to emphasise the lesson that unsystematic colonisation is doomed to failure. There is